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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,718	07/25/2000	Shinichi Yoshimura	112857-062	6804

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EXAMINER

KAO, CHIH-CHENG G

ART UNIT PAPER NUMBER

2882

DATE MAILED: 12/06/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/624,718	YOSHIMURA, SHINICHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chih-Cheng Glen Kao	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

1. Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kochi et al. (US Patent 6,166,583). Kochi et al. discloses an image processing apparatus and method comprising: a light reception means and step (Fig. 19A, #60), an arithmetic operation means and step (Fig. 19A, #50), an outputting means and step (Fig. 12, S1-3), and a timing adjustment means and step (col. 11, lines 9-12).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kochi et al. as applied to claims 1 and 6 above, and further in view of Yamada (JP 7-105342).

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3. Regarding claims 2 and 7, Kochi et al. disclose an apparatus and method as recited above. However, Kochi et al. does not specifically disclose a storage means and step with timing.

Yamada teaches a storage means and step with timing (translated Abstract).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the storage means and step of Yamada with the apparatus and method of Kochi et al., since one would be motivated to reduce memory capacity and improve processing speed as shown by Yamada (translated Abstract).

4. Regarding claims 3, 4, 8, and 9, Kochi et al. in view of Yamada disclose an apparatus and method as recited above. Kochi et al. further disclose comparison operation for a combination of a plurality of ones stored in memory for determining a maximum value or a minimum value of the signal (col. 14, lines 42-50). However, Kochi et al. does not specifically disclose the comparison with the arithmetic operation.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the comparison operation included with the arithmetic operation with the suggested apparatus and method of Kochi et al. in view of Yamada, since forming in one step and in an operation which has formerly been formed in two steps and put together involves only routine skill in the art. One would be motivated to combine the two steps into one step to reduce components.

5. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kochi et al. as applied to claims 1 and 6 above. Kochi et al. disclose an apparatus and method as recited

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above. However, Kochi et al. does not specifically disclose the outputting means for each row or column.

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the outputting means for each row or column with the apparatus and method of Kochi et al., since such a modification would have involved a mere change in the number and location of pixels to output. Based on Figure 19A, one having ordinary skill in the art would have found it obvious to output one row by changing " $\Delta X$ " while keeping " $\Delta Y$ " constant, thus outputting a row. One would be motivated by engineering expediency in order to analyze or create an image based on any group of pixels.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (703) 605-5298. The examiner can normally be reached on M - Th (8 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



gk  
November 29, 2001



ROBERT H. KIM  
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